

**REMARKS/ARGUMENTS**

In the Office Action issued September 2, 2005, claims 1-6 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2003/0189711 to Orr et al. (hereinafter "Orr"). Claims 2 and 3 were rejected under 35 U.S.C. §103(a) as being unpatentable over Orr in view of U.S. Patent Publication No. 2003/0030881 to Xia et al. (hereinafter "Xia"). The claims were objected to as not being on a separate page.

Claims 1-6 are now pending in this application.

The applicant respectfully submits that the present invention according to claim 1 is not anticipated by Orr. Orr discloses optical cavity ringdown laser absorption spectroscopy (CRDS). As described in paragraph [0003] of Orr, optical absorption measurements of the sample inserted in the RINGDOWN CAVITY are made by moving the distance of paired mirrors (5, 6).

Firstly, Orr discloses a beam splitter (10), which splits the reflected light from the ringdown cavity in order to prevent backward light coming towards CW laser (2). By contrast, the present invention, according to claim 1 requires a splitting element operable to split light outputted from a light source. Beam splitter (10) does not split the light coming from the light source, CW laser (2), but rather splits the reflected light from the ringdown cavity. Thus, beam splitter (10) does not "split light outputted from a light source". Therefore, Orr does not disclose or suggest the required splitting element operable to split light outputted from a light source.

Secondly, the Examiner asserts that Orr discloses that the structure of Fig.8 includes a second monitoring device that is not shown. However, Orr clearly discloses that such a detector is not part of the disclosed structure:

An optical detector (component 14, labelled PDII in FIG. 1) of the forward-transmitted light field E, is superfluous in such a single-ended detection embodiment; it has therefore been omitted from FIG. 8. Nevertheless, such a secondary detector can be useful for preliminary alignment and optimisation of the cw-CRDS apparatus. (See para. [0145], emphasis added)

Although Orr discloses that a secondary detector can be useful for preliminary alignment and optimization, this is not a disclosure or suggestion of the requirement of the present invention of a second monitoring device operable to detect an intensity of light transmitted through the filter device.

Thirdly, the Examiner asserts that wavelength fluctuation of the light source is detected in Fig.8. However, the system in Fig.8 does CRDS and optical absorption measurements of the sample inserted in the RINGDOWN CAVITY and does not detect wavelength fluctuation of the light source. Thus, Orr does not disclose or suggest the requirement that a wavelength fluctuation of the light source is detected based on intensity of light detected by the first or second monitoring devices.

Therefore, the present invention, according to claim 1, is not anticipated by Orr.

The applicant respectfully submits that the present invention according to claims 2 and 3 is not unpatentable over Orr in view of Xia because even if Orr and Xia were combined as suggested by the Examiner, the result would not be the present invention as claimed.

As discussed above, Orr does not disclose or suggest the required splitting element operable to split light outputted from a light source, the required second monitoring device operable to detect an intensity of light transmitted through the filter device, or the requirement that a wavelength fluctuation of the light source is detected based on intensity of light detected by the first or second monitoring devices.

Xia discloses an optical device that comprises a first birefringent crystal having a first length, a second birefringent crystal having a second length, and a dynamic polarization rotator. Xia does not disclose or suggest the required splitting element operable to split light outputted from a light source, the required second monitoring device operable to detect an intensity of light transmitted through the filter device, or the requirement that a wavelength fluctuation of the light source is detected based on intensity of light detected by the first or second monitoring devices.

Thus, the combination of Orr and Xia still does not disclose or suggest the requirements of claim that of a splitting element operable to split light outputted from a light source, a second monitoring device operable to detect an intensity of light

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transmitted through the filter device, and that a wavelength fluctuation of the light source is detected based on intensity of light detected by the first or second monitoring devices.

Therefore, the present invention according to claim 1, and according to claims 2 and 3, which depend from claim 1, is not unpatentable over Orr in view of Xia.

Each of the claims now pending in this application is believed to be in condition for allowance. Accordingly, favorable reconsideration of this case and early issuance of the Notice of Allowance are respectfully requested.

. Patent Application No. 10/766,867  
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**Additional Fees:**

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with this application to Deposit Account No. 19-5127 (19546.0049).

**Conclusion**

In view of the foregoing, all of the Examiner's rejections to the claims are believed to be overcome. The Applicants respectfully request reconsideration and issuance of a Notice of Allowance for all the claims remaining in the application. Should the Examiner feel further communication would facilitate prosecution, he is urged to call the undersigned at the phone number provided below.

Respectfully Submitted,



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